



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2022-0680; Project Identifier MCAI-2021-01415-T; Amendment 39-22146; AD 2022-17-08]

RIN 2120-AA64

Airworthiness Directives; Airbus SAS Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: The FAA is superseding Airworthiness Directive (AD) 2020-22-03, which applied to all Airbus SAS Model A330-200, -200 Freighter, and -300 series airplanes.

AD 2020-22-03 required revising the existing airplane flight manual (AFM) to incorporate procedures to be applied if an engine bleed over-temperature occurs when the associated engine bleed valve is jammed open, and provided for the optional embodiment of updated flight warning computer (FWC) software, which terminated the AFM revision. This AD was prompted by the development of new maintenance actions and software related to over-temperature failure conditions. This AD continues to require the actions specified in AD 2020-22-03, requires accomplishing the new maintenance tasks and corrective actions, and mandates embodiment of the updated FWC software for certain airplanes, as specified in a European Union Aviation Safety Agency (EASA) AD, which is incorporated by reference. This AD also prohibits the installation of affected FWC software. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For material incorporated by reference (IBR) in this AD, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email ADs@easa.europa.eu; Internet www.easa.europa.eu. You may find this IBR material on the EASA website at <https://ad.easa.europa.eu>. You may view this material at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available in the AD docket at www.regulations.gov under Docket No. FAA-2022-0680.

Examining the AD Docket

You may examine the AD docket at www.regulations.gov under Docket No. FAA-2022-0680; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the mandatory continuing airworthiness information (MCAI), any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Vladimir Ulyanov, Aerospace Engineer, Large Aircraft Section, International Validation Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax: 206-231-3229; email: vladimir.ulyanov@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

EASA, which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2021-0281, dated December 17, 2021 (EASA AD 2021-0281) (also referred to as the MCAI), to correct an unsafe condition for Airbus SAS Model A330-201, -202, -203, -223, -223F, -243, and -243F airplanes, Model A330-301, -302, -303, -321, -322, -323, -341, -342, -343, and -743L airplanes. Model A330-743L airplanes are not certificated by the FAA and are not included on the U.S. type certificate data sheet; this AD therefore does not include those airplanes in the applicability.

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2020-22-03, Amendment 39-21299 (85 FR 66873, October 21, 2020) (AD 2020-22-03). AD 2020-22-03 applied to all Airbus SAS Model A330-200, -200 Freighter, and -300 series airplanes. The NPRM published in the *Federal Register* on June 16, 2022 (87 FR 36266). The NPRM was prompted by the development of new maintenance actions and software related to over-temperature failure conditions. The NPRM proposed to continue to require the actions specified in AD 2020-22-03, to require accomplishing the new maintenance tasks and corrective actions, and to mandate embodiment of the updated FWC software for certain airplanes, as specified in EASA AD 2021-0281. The NPRM also proposed to prohibit the installation of affected FWC software.

The FAA is issuing this AD to address the possibility of a jammed engine bleed valve, which could lead to damage of the bleed manifold and the ducts downstream of the engine bleed system, exposure of the surrounding structure to heat stress, and possible reduced structural integrity of the airplane. See the MCAI for additional background information.

Discussion of Final Airworthiness Directive

Comment

The FAA received a comment from the Air Line Pilots Association, International (ALPA) who supported the NPRM without change.

Conclusion

The FAA reviewed the relevant data, considered the comment received, and determined that air safety requires adopting this AD as proposed. Accordingly, the FAA is issuing this AD to address the unsafe condition on this product. Except for minor editorial changes, this AD is adopted as proposed in the NPRM. None of the changes will increase the economic burden on any operator.

Related Service Information Under 1 CFR Part 51

EASA AD 2021-0281 specifies procedures for amending the applicable AFM to incorporate procedures to be applied if an engine bleed over-temperature occurs when the associated engine bleed valve is jammed open. EASA AD 2020-0281 also specifies that embodiment of updated FWC software standard T9 eliminates the need for the AFM amendment. EASA AD 2021-0281 also describes maintenance tasks for failures related to over-temperature conditions and corrective actions (repair). EASA AD 2021-0281 also specifies procedures for the embodiment of updated FWC software standard T9-3, and, for certain airplanes concurrent embodiment of system data acquisition concentrator (SDAC) software standard C13 or FWC software standard K3-2 and SDAC software standard C3-0A. Finally, EASA AD 2021-0281 prohibits the installation of affected FWC software (FWC software standard T9-2 or earlier). This material is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Costs of Compliance

The FAA estimates that this AD affects 115 airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:

Estimated costs for required actions

Labor cost	Parts cost	Cost per product	Cost on U.S. operators
AFM Revision: 1 work-hour X \$85 per hour = \$85	\$0	\$85	\$9,775
Software Update: 3 work-hours X 85 per hour = \$255	\$0	\$255	Up to \$29,325
Maintenance Tasks: 7 work-hours X \$85 per hour = \$595	\$720	\$595	\$151,225
Concurrent Actions: Up to 4 work-hours X \$85 per hour = Up to \$340	\$0	Up to \$340	Up to \$39,100

Estimated costs for optional actions

Labor cost	Parts cost	Cost per product
2 work-hours X \$85 per hour = \$170	\$0	\$170

The FAA has received no definitive data that enables the agency to provide cost estimates for the on-condition actions specified in this AD.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by

prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by:

- a. Removing Airworthiness Directive (AD) 2020-22-03, Amendment 39-21299

(85 FR 66873, October 21, 2020); and

b. Adding the following new airworthiness directive:

2022-17-08 Airbus SAS: Amendment 39-22146; Docket No. FAA-2022-0680; Project Identifier MCAI-2021-01415-T.

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD replaces AD 2020-22-03, Amendment 39-21299 (85 FR 66873, October 21, 2020) (AD 2020-22-03).

(c) Applicability

This AD applies to all Airbus SAS Model airplanes, certificated in any category, as identified in paragraphs (c)(1) through (3) of this AD.

(1) Model A330-201, -202, -203, -223, and -243 airplanes.

(2) Model A330-223F and -243F airplanes.

(3) Model A330-301, -302, -303, -321, -322, -323, -341, -342, and -343 airplanes.

(d) Subject

Air Transport Association (ATA) of America Code 75, Air; Code 36, Pneumatic.

(e) Unsafe Condition

This AD was prompted by a report that during a certification exercise, it was identified that there was a risk of an engine bleed system over-temperature, without the engine bleed valve closing; the associated engine bleed valve should automatically close. This AD was also prompted by the development of new maintenance actions and software related to over-temperature failure conditions. The FAA is issuing this AD to address the possibility of a jammed engine bleed valve, which could lead to damage of the bleed manifold and the ducts downstream of the engine bleed system, exposure of the

surrounding structure to heat stress, and possible reduced structural integrity of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Requirements

Except as specified in paragraph (h) of this AD: Comply with all required actions and compliance times specified in, and in accordance with, European Union Aviation Safety Agency (EASA) AD 2021-0281, dated December 17, 2021 (EASA AD 2021-0281).

(h) Exceptions to EASA AD 2021-0281

(1) Where EASA AD 2021-0281 refers to October 1, 2020 (the effective date of EASA AD 2020-0205), this AD requires using November 5, 2020 (the effective date of AD 2020-22-03).

(2) Where EASA AD 2021-0281 refers to its effective date, this AD requires using the effective date of this AD.

(3) Where paragraph (1) of EASA AD 2021-0281 specifies to “inform all flight crews, and, thereafter, operate the aeroplane accordingly,” this AD does not require those actions as those actions are already required by existing FAA operating regulations.

(4) Where paragraphs (6) and (7) of EASA AD 2021-0281 specifies actions if “any discrepancies are detected,” for this AD discrepancies include failures related to an over-temperature situation, hidden failures in equipment for a “not isolated over-temperature” failure condition, cracking on the exchanger outlet temperature sensor, or dual drift in the exchanger outlet temperature sensor.

(5) Where paragraph (11) of EASA AD 2021-0281 specifies that an airplane with certain modifications is compliant with “the requirements of paragraph (2) of EASA AD 2020-0077,” for this AD use “for the corresponding requirements of paragraph (2) of

EASA AD 2020-0077 that are required by paragraph (g) of AD 2020-17-16, Amendment 39-21221 (85 FR 54900, September 3, 2020).”

(6) The “Remarks” section of EASA AD 2021-0281 does not apply to this AD.

(i) No Reporting Requirements

Although the service information referenced in EASA AD 2021-0281 specifies to submit certain information to the manufacturer, this AD does not include that requirement.

(j) Additional FAA AD Provisions

The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs)*: The Manager, Large Aircraft Section, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or responsible Flight Standards Office, as appropriate. If sending information directly to the Large Aircraft Section, International Validation Branch/manager of the certification office, send it to the attention of the person identified in paragraph (k) of this AD. Information may be emailed to: 9-AVS-AIR-730-AMOC@faa.gov.

(2) *Contacting the Manufacturer*: For any requirement in this AD to obtain instructions from a manufacturer, the instructions must be accomplished using a method approved by the Manager, Large Aircraft Section, International Validation Branch, FAA; or EASA; or Airbus SAS’s EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

(3) *Required for Compliance (RC)*: Except as required by paragraph (j)(2) of this AD, if any service information referenced in EASA AD 2021-0281 contains paragraphs that are labeled as RC, the instructions in RC paragraphs, including subparagraphs under an RC paragraph, must be done to comply with this AD; any paragraphs, including

subparagraphs under those paragraphs, that are not identified as RC are recommended. The instructions in paragraphs, including subparagraphs under those paragraphs, not identified as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the instructions identified as RC can be done and the airplane can be put back in an airworthy condition. Any substitutions or changes to instructions identified as RC require approval of an AMOC.

(k) Additional Information

For more information about this AD, contact Vladimir Ulyanov, Aerospace Engineer, Large Aircraft Section, International Validation Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax: 206-231-3229; email: vladimir.ulyanov@faa.gov.

(l) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) European Union Aviation Safety Agency (EASA) AD 2021-0281, dated December 17, 2021.

(ii) [Reserved]

(3) For EASA AD 2021-0281, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email ADs@easa.europa.eu; Internet www.easa.europa.eu. You may find this EASA AD on the EASA website at <https://ad.easa.europa.eu>.

(4) You may view this material at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(5) You may view this material that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email fr.inspection@nara.gov, or go to: www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued on August 10, 2022.

Gaetano A. Sciortino, Deputy Director for Strategic Initiatives,
Compliance & Airworthiness Division,
Aircraft Certification Service.

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